PATHOLOGY AND BACTERIOLOGY.

UNDER THE CHARGE OF
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Observations on the Distribution and Culture of the Chancroid Bacillus.—DAVIS (*Journal of Medical Research*, 1903, vol. ix. p. 401) has made an examination of the pus of forty cases of genital ulcerations clinically resembling chancroid. In thirty-two bacilli were found corresponding exactly in morphology and staining reactions to the Ducrey bacillus, the characteristic chain arrangement occurring in ten of these. On media containing a considerable proportion of fresh blood, pure cultures of the Ducrey bacillus were obtained directly from the pus of primary genital chancroids in two cases, and in many others there was a growth of this organism, mixed, however, with contaminating bacteria. One instance of chancroid ulceration of the skin of the abdomen, resulting from accidental autoinoculation from a genital lesion yielded pure cultures. Of seven chancroidal buboes, pure cultures were obtained in three cases. Besides the primary genital lesions, the bacillus was cultivated in pure culture from two cases of primary extragenital chancroid, the ulcerations appearing upon the fingers.

The bacillus may be identified by its morphology and staining reaction, together with its inability to grow on ordinary culture media. The growth is most luxuriant in a medium of fresh blood and bouillon, but unmixed human blood is the best medium for obtaining cultures from a source open to contamination.

A guinea-pig was inoculated by rubbing in two loopfuls of a pure twenty-four-hour culture upon a scarified area on the back, but the result was negative. Monkeys of the genus Macaccus hemestrinus were inoculated by the same method and developed definite ulcers from which the Ducrey bacillus could be isolated.

The author believes that chancroid may be primary upon an extragenital site, and that bacteriological examination of all ulcers of this type is likely to establish in the future a greater prevalence of extragenital chancroid than has hitherto been reported.—W. T. L.

On the Pathology and Bacteriology of Landry's Paralysis.—BUZZARD (*Brain*, 1903, part i. p. 94), in reviewing the pathology and bacteriology of Landry's paralysis, calls attention to the disproportion between the histological changes which can be demonstrated in the brain, cord, and peripheral nerves in certain cases and the grave clinical manifestations which characterize the disease. In a few cases no demonstrable lesions are found in the nervous system; in a large majority of cases the lesions are such as may be produced by the action of a microbic toxin apart from the microbes themselves, and in this latter group bacteriological examinations prove negative. A few instances make up a third group in which the changes are those of a disseminated or diffuse myelitis or meningomyelitis, and in some of the cases pathogenic organisms have been found in the meninges, spinal cord, cerebrospinal fluid, and occasionally in the blood. Among the most notable observations are those of Courmont and Bonne, Roger and Josué, and Russell. These observers have demonstrated in the blood or meninges of this latter type of the disease a diplococcus which they considered bore certain resemblances to the meningococcus of Weichselbaum and to the pneumococcus. The author reports a typical case of Landry's paralysis in a man aged thirty-three years. There was a gradual ascending paralysis which lasted for about eighteen days and terminated with involvement of the respiratory muscles. At autopsy there was no noticeable alterations in the nervous system. Microscopic examination showed morbid changes of very slight degree of intensity, but of rather wide distribution, consisting principally in a chromatolysis of the ganglion cells of the anterior and posterior horns of the spinal cord. In cultures from the blood a diplococcus was isolated which stained fairly well by Gram's method. It grew slowly on the ordinary culture media. In sections of the dura mater a diplococcus could be demonstrated which resembled in morphology the coccus isolated from the blood. A subdural injection of the cultivated coccus into rabbits produced, after some days, a rapidly spreading palsy, and from the blood and dura mater of these animals the same organisms could be cultivated. The author draws attention to the unusual situation of the coccus, namely, in the dura mater, and suggests that careful bacteriological examination of this membrane should be made in cases similar to that under discussion.—W. T. L.

Experiments on Tuberculosis.—DEAN (*Journal of Pathology and Bacteriology*, 1903, vol. viii. p. 458) reports a series of interesting and careful experiments concerning the infection of animals by tubercle bacilli obtained from human sources. Observations were first made to determine whether the virulence of tubercle bacilli from the sputum of tuberculous patients could be increased for calves by an intermediate passage through pigs, cats, rabbits, and rats. The intermediate animals were inoculated with tuberculous sputum, allowed to die of the disease, and then from the most extensively affected organs the tubercle bacillus was cultivated upon artificial media. Finally, calves were inoculated subcutaneously from these cultures. Previous to the inoculations all possible precautions were taken to prevent any contamination of the calves from tuberculous cattle, and each animal received injections of tuberculin to exclude the possibility of bovine tuberculosis. After an interval of several months the calves were killed, full autopsies were performed, most of the organs were examined microscopically, and inoculation experiments made with rabbits and guinea-pigs. Of the eleven calves used, a tuberculous focus was found only in one or two. This consisted in a small, caseous nodule, which was discovered at the site of primary inoculation. Control calves inoculated directly with tuberculous